Dear Dr. Weed:

Thank you very much for sending your ms.

This is, frankly, a far superior job of presentation than your previous draft. I shall be surprised if it is not accepted.

The question of selection of the variants is the one that is, of course, of the most immediate genetic interest. While your experiment certainly weighs in favor of induction, I think you will admit the matter is not yet conclusively settled.

We are just about to set off on a trip to the West Coast, and I will have to wait till we get back before resuming anything with the problem. From your description, I was looking for a variant of much smaller colony size. On our medium, your Cu bug from B gave colonies about 1/3 to 1/2 the diameter of the wild type after 16 hours. Does your indication of "1/6 to 1/10 the 'size' " refer to the area or the diameter? Colwell's variants, on the other hand, were almost invisible for the first 24 hours.

I can confirm the lactose-character of the B/Cu. On EMB lactose, it gives an appearance characteristic of slow-lactose-fermenting mutants, with numerous reversions to Lac+. This is one of the most interesting features to us, as we have been concerned with lactose-negative mutants for a long time. Is this a characteristic feature of your numerous B/Cu isolations? If so, the platings on EMB lactose may be a better means of scoring them. Such mutants are not too uncommon even in untreated cultures of B, so I have to enquire whether several independent B/Cu were tested. Your remarks on p. 7 are somewhat ambiguous on this point.

I will let you know just what we will do on this. I think we should try to verify induction vs. selection, unless someone else is already on the problem. The second point would be to try to investigate the genetic basis of the effect by crossing techniques. If you do know of anyone else actively engaged in either problem, would you let me know, as I do not want to get involved too deeply in any needless duplication of work.

Best wished to you in your new practice.

Sincerely,

Joshua Lederberg